

**REMARKS**

Claims 1 and 3-30 currently appear in this application. The Office Action of July 17, 2008, has been carefully studied. These claims define novel and unobvious subject matter under Sections 102 and 103 of 35 U.S.C., and therefore should be allowed. Applicant respectfully requests favorable reconsideration, entry of the present amendment, and formal allowance of the claims.

**Rejections under 35 U.S.C. 112**

Claims 1-30 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

This rejection is respectfully traversed. Claims 4 and 10 have been amended in accordance with the Examiner's helpful suggestions.

Claims 1 and 10 have been amended to recite that the boiling point of the liquid phase is lower than the melting point of the polyolefin wax or mixture of polyolefin waxes or the nailing point range of the liquid phase is lower than the melting point range of the polyolefin wax or mixture of polyolefin waxes. This makes it clear that the

boiling/melting points are compared and the boiling point range/melting point ranges are compared.

**Aft Rejections**

Claims 1, 3-25 and 28-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kubo et al., US 4,499,225.

It is the Examiner's position that the wax will not melt until the lower boiling point water has evaporated.

This rejection is respectfully traversed. Claims 1 and 10 have been amended to include the limitations of claim 2, namely, that the liquid phase is a mixture of alcohol and water. Claim 2 is not rejected as being obvious over Kubo, so it is respectfully submitted that claims 1, 3-25 and 28-30, which now include the limitations of claim 2, should now be allowable.

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cifuentes et al., US 5,258,063.

This rejection is respectfully traversed. It is not understood how the compositions described in Cifuentes are suitable for providing coalesced wax particles on a surface as claimed herein, since the Cifuentes compositions have fundamental differences as compared to the coating compositions claimed herein.

Cifuentes does not mention the boiling points of the solvent except in Example 5, where it is explained how the wax particles were suspended in a solvent mixture of mineral spirits and kerosene. This mixture was heated to approximately 80°C to melt the waxes, without any hint that this heated the solvent to above its boiling point.

In contrast thereto, the presently claimed composition comprises polyolefin wax(es) suspended in a liquid phase comprising an alcohol and water. The liquid phase of the herein claimed composition has a boiling point or boiling point range that is lower than the melting point or melting point range of the polyolefin wax or the mixture of polyolefin waxes so that, upon heating the composition, the liquid phase will evaporate before the wax melts.

The polyolefin waxes used in the presently claimed composition are suspended in a liquid comprising only a single liquid phase. Although this is not recited *in haec verbis* in the present specification, it is clear from the description at page 16 of the published PCT application that several references are made to "the liquid phase", at page 17, lines 5-10, it is stated that "It [the liquid phase] may comprise an alcohol, preferably ethyl alcohol, and optionally water" and further that the concentration of water may be up to 50% w/w in a specific embodiment. Thus, this may be read as an

indication that the alcohols used are those miscible with water with up to 50% water, forming only a single liquid phase. Likewise, such a mixture of water-miscible solvents and water will typically have a "boiling point range", depending upon the concentrations of the individual components, as referred to at page 16, lines 9-12 of the original PCT application. In contrast thereto, a two-phase system cannot be described as having a single boiling point or a single boiling point range. Since a boiling point or a boiling point range will normally exist independently for each of the liquid phases.

In contrast to the single liquid phase as claimed herein, Cifuentes uses suspensions explicitly comprising an oil phase and a water phase, as can be clearly seen from the Examples. The compositions comprise oil phases of kerosene and/or mineral spirits. Some of the liquids used in Cifuentes also contain 1-butanol. However, the 1-butanol is added to the reaction mixture of the organosilicon compound and the polycycloaliphatic amine, and not directly to the coating composition. Given the low solubility of 1-butanol in water (approximately 10%), one skilled in the art would expect that most of the 1-butanol would be present in the oil phase upon formation of emulsions from the constituent liquids of Cifuentes.

Cifuentes lists fatty alcohol amine sulfates at column 2, lines 66-68, as surfactants and not as solvents. In contrast thereto, the properties of the liquid phase of the presently claimed composition as explained at page 17 of the original PCT application act as solvents, rather than surfactants or emulsifiers.

In summary, the Cifuentes compositions comprise wax particles suspended in an oil phase, which phase is emulsified with water (see Examples 2 and 5). However, it should be noted that the Cifuentes composition contains, "the reaction product of an organosilicon compound and a polycycloaliphatic amine", which product is a film-former. The Cifuentes compositions may also include 1-butanol, which, as noted above, is most abundant in the oil phase. The composition claimed herein uses polyolefin waxes to form a protective coating on surfaces; there is no requirement for a separate film former as in Cifuentes. Accordingly, Cifuentes has little to do with the herein claimed wax composition.

Claims 1, 3-7, 10-25 and 29-30 are rejected under 35 U.S. C. 103 (a) as being unpatentable over Beyle, US 3,726,820.

This rejection is respectfully traversed. Claims 1 and 10 have been amended to include the limitations of claim 2, namely, that the liquid phase is a mixture of alcohol and

water. Claim 2 is not rejected as being obvious over Beyle, so it is respectfully submitted that claims 1, 3-25 and 28-30, which now include the limitations of claim 2, should now be allowable.

Specification

The specification is objected to because a serial number is missing.

The present amendment corrects this omission.

In view of the above, it is respectfully submitted that the claims are now in condition for allowance, and favorable action thereon is earnestly solicited.

Respectfully submitted,

BROWDY AND NEIMARK, P.L.L.C.  
Attorneys for Applicant

By: 

Anne M. Kornbau  
Registration No. 25,884

AMK:srd  
Telephone No.: (202) 628-5197  
Facsimile No.: (202) 737-3528  
G:\BN\I\Inte\MOLLER5\pto\2008-10-17Amendment.doc